

wherein W is optionally substituted aryl; optionally substituted C_5 - C_7 cycloalkyl; -CHR¹R² where R¹ and R² are independently selected from hydrogen, optionally substituted C_1 - C_6 alkyl, optionally substituted C_3 - C_7 cycloalkyl and optionally substituted aryl; OR' where R' is optionally substituted aryl; optionally substituted C_3 - C_7 cycloalkyl; or optionally substituted C_1 - C_6 alkyl; provided that R¹ and R² are not both hydrogen;

Z is imino, C₁-C₂ alkylene, -CH₂NH- or -CH₂CH₂NH-;

X is O or S; and

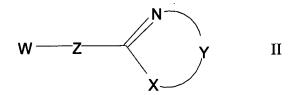
Y is optionally substituted C_2 - C_3 alkylene; provided that W is not OR' when Z is imino or - CH_2NH_{-} ;

or a pharmaceutically acceptable salt or ester thereof.

46. (Amended) The method according to claim 45 wherein the disease is a disease of the central nervous system selected from the group consisting of dementia, mood disturbances, degenerative conditions and neurodegenerative diseases.

47. (Amended) A method for the treatment of glaucoma comprising administering an effective amount of a compound of formula II





wherein W is optionally substituted aryl; optionally substituted C_5 - C_7 cycloalkyl; -CHR¹R² where R¹ and R² are independently selected from hydrogen, optionally substituted C_1 - C_6 alkyl, optionally substituted C_3 - C_7 cycloalkyl and optionally substituted aryl; OR' where R' is optionally substituted aryl; optionally substituted C_3 - C_7 cycloalkyl; or optionally substituted C_1 - C_6 alkyl; provided that R¹ and R² are not both hydrogen;

Z is imino, C₁-C₂ alkylene, -CH₂NH- or -CH₂CH₂NH-;

X is O or S; and

Y is optionally substituted C₂-C₃ alkylene; provided that W is not OR' when Z is imino or -CH₂NH-; and

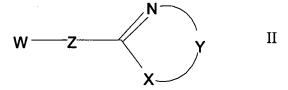
with the further provisos that

- a) when Y is CH₂CH₂, X is O and Z is imino then
 - (i) if W is CHR¹R² and R¹ is H then R² is not selected from phenyl; phenyl substituted with methoxy, Br, Cl, F or trifluoromethyl; 3-nitrophenyl; 3- or 4-methylphenyl; 2- or 4-bromomethyl phenyl; 2- or 4-chloromethylphenyl; or 2,3- or 2,6-dimethylphenyl; and

- (ii) if W is CHR¹R² and R¹ is CH₃ or cyclopropyl then R² is not phenyl or phenyl substituted with alkyl, halomethyl, fluoro or trifluoromethyl; and
- b) when Y is $(CH_2)_{2-4}$, X is O or S, Z is imino and W is CHR^1R^2 , then
 - (i) if R¹ is CF₃, CF₂CF₃ or CF₂CF₂CF₃ then R² is not alkyl, optionally substituted cycloalkyl or optionally substituted aryl, and
 - (ii) if R¹ is optionally substituted cyclopropyl, R² is not H, alkyl or optionally substituted cyclopropyl;

or a pharmaceutically acceptable ester or salt thereof, to a subject in need thereof.

48. (Amended) A method for the treatment of diseases of the central nervous system, cardiovascular system, or the kidney, or for the treatment of diseases associated with abnormal adrenal gland secretions, or in the treatment of hyperglycaemia, glaucoma, peptic ulcer or to produce analgesia which comprises administering an effective amount of a compound of formula II



wherein W is optionally substituted aryl; optionally substituted C_5 - C_7 cycloalkyl; -CHR¹R² where R¹ and R² are independently selected from hydrogen, optionally substituted C_1 - C_6 alkyl, optionally substituted C_3 - C_7 cycloalkyl and optionally substituted aryl; OR' where R' is

optionally substituted aryl; optionally substituted C_3 - C_7 cycloalkyl; or optionally substituted C_1 - C_6 alkyl; provided that R^1 and R^2 are not both hydrogen;

Z is imino, C₁-C₂ alkylene, -CH₂NH- or -CH₂CH₂NH-;

X is O or S; and

Y is optionally substituted C_2 - C_3 alkylene; provided that W is not OR' when Z is imino or $-CH_2NH$ -; and

with the further provisos that

- a) when Y is CH₂CH₂, X is O and Z is imino then
 - (i) W is not unsubstituted or 2-mono-, 2,2-di, 2,5-di, 2,6-di or 2,4,6-tri C₁₋₃ alkyl substituted cyclohexyl or 2-mono- or 2,5,-di C₁₋₃ alkyl substituted cycloheptyl; and
 - (ii) if W is CHR¹R² and R¹ is H then R² is not selected from phenyl; phenyl substituted with methoxy, Br. C1, F or trifluoromethyl; 3-nitrophenyl; 3- or 4-methylphenyl; 2- or 4-bromomethylphenyl; 2- or 4-chloromethylphenyl; or 2,3- or 2,6 dimethylphenyl; and
 - (iii) if W is CHR¹R² and R¹ is CH₃ or cyclopropyl then R¹ is not phenyl or phenyl substituted with alkyl, halomethyl, fluoro or trifluoromethyl; and
- b) when Y is $(CH_2)_{2-4}$, X is O or S, Z is imino and W is CHR^1R^2 , then
 - (i) if R¹ is CF₃, CF₂CF₃ or CF₂CF₂CF₃ then R² is not alkyl, optionally substituted cycloalkyl or optionally substituted aryl, and

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(ii) if R¹ is optionally substituted cyclopropyl, R² is not H, alkyl or optionally substituted cyclopropyl;

or a pharmaceutically acceptable ester or salt thereof, to a subject in need thereof.

Please add the following new claims:

- 49. (New) The method according to claim 46, wherein the disease is a degenerative condition selected from the group consisting of stroke, aging, ischemia, and CNS trauma.
- 50. (New) The method according to claim 46, wherein the disease is a neurodegenerative disease selected from the group consisting of Alzheimer's disease and Parkinson's disease.
- 51. (New) The method according to claim 45, 47 or 48, wherein W is aryl (optionally substituted with hydroxy, C₁-C₆ alkyl, C₁-C₆ alkoxy, NO₂, NH₂, C₁-C₆ haloalkyl, halogen, C₃-C₆ cycloalkyl, aryl, C₂-C₆ alkenyl, C₁-C₆ alkynyl or aryloxy); C₅-C₆ cycloalkyl (optionally substituted with hydroxy, C₁-C₆ alkyl, C₁-C₆ alkoxy, NO₂, NH₂, C₁-C₆ haloalkyl, halogen, C₃-C₆ cycloalkyl, aryl, C₂-C₆ alkenyl, C₂-C₆ alkynyl or aryloxy); -CHR¹R² where R¹ and R² are independently selected from hydrogen, C₁-C₆ alkyl (optionally substituted with hydroxy, C₁-C₆ alkyl, C₁-C₆ alkoxy, NO₂, NH₂, C₁-C₆ haloalkyl, halogen, C₃-C₆ cycloalkyl, aryl, C₂-C₆ alkenyl, C₂-C₆ alkynyl or aryloxy), C₃-C₆ cycloalkyl (optionally substituted with hydroxy, C₁-C₆ alkenyl, C₂-C₆ alkynyl or aryloxy) and aryl (optionally substituted with hydroxy, C₁-C₆ alkenyl, C₂-C₆ alkynyl or aryloxy) and aryl (optionally substituted with hydroxy, C₁-C₆ alkyl, C₁-C₆ alkoxy, NO₂, NH₂, C₁-C₆ haloalkyl, halogen, C₃-C₆ cycloalkyl, aryl, C₂-C₆ alkenyl, C₂-C₆ alkynyl or aryloxy); OR' where R' is aryl (optionally substituted with hydroxy, C₁-C₆ alkyl, C₁-C₆ alkoxy, NO₂, NH₂, C₁-C₆ haloalkyl, halogen, C₃-C₆ cycloalkyl, aryl, C₂-C₆ alkenyl, C₂-C₆ alkynyl or

aryloxy); C₃-C₆ cycloalkyl (optionally substituted with hydroxy, C₁-C₆ alkyl, C₁-C₆ alkoxy, NO₂, NH₂, C₁-C₆ haloalkyl, halogen, C₃-C₆ cycloalkyl, aryl, C₂-C₆ alkenyl, C₂-C₆ alkynyl or aryloxy); or C₁-C₆ alkyl (optionally substituted with hydroxy, C₁-C₆ alkyl, C₁-C₆ alkoxy, NO₂, NH₂, C₁-C₆ haloalkyl, halogen, C₃-C₆ cycloalkyl, aryl, C₂-C₆ alkenyl, C₂-C₆ alkynyl or aryloxy).

- 52. (New) The method according to claim 45, 47 or 48, wherein W is phenyl, cyclohexyl or naphthyl, each of which may be optionally substituted with one to three substituents selected from hydroxy, methoxy, ethoxy, benzyloxy, NO₂, NH₂, halogen, methyl and ethyl; or –CHR¹R² where R¹ and R² are independently selected from phenyl, naphthyl, cyclohexyl, cyclopentyl, cyclopropyl, methyl, ethyl, propyl and butyl, each of which may be optionally substituted with hydroxy, methoxy, ethoxy, benzyloxy, NO₂, NH₂, halogen, methyl and ethyl.
- 53. (New) The method according to claim 45, 47 or 48, wherein Z is imino or CH₂CH₂NH-.
- 54. (New) The method according to claim 45, 47 or 48, wherein Y is C₂-C₃ alkylene optionally substituted with C₁-C₄ alkyl, C₃-C₆ cycloalkyl, C₁-C₆ alkanoyloxy or C₁-C₆ alkyloxycarbonyl, or with two substituents which join together to form a 5-6 membered carbocyclic or heterocyclic ring.
- 55. (New) The method according to claim 54, wherein Y is unsubstituted C₂-C₄ alkylene.
 - 56. (New) The method according to claim 54, wherein Y is ethylene.

57. (New) The method according to claim 45, 47 or 48, wherein the compound of formula II is a compound of formula III:

wherein R³, R⁴, R⁵ and R⁶ are independently selected from hydrogen, hydroxy, C₁-C₆ alkyl, C₁-C₆ alkoxy, NO₂, NH₂, C₁-C₆ haloalkyl, halogen, C₃-C₆ cycloalkyl, aryl, C₂-C₆ alkenyl, C₂-C₆ alkynyl and aryloxy;

Z is imino, C_1 - C_2 alkylene, or $-CH_2CH_2NH$ -;

R⁷ and R⁸ are independently selected from hydrogen, C₁-C₄ alkyl, C₃-C₆ cycloalkyl, C₁-C₆ alkanoyloxy and C ₁-C₆ alkyloxycarbonyl, or R⁷ and R⁸ may together form a 5 or 6 membered aromatic or non-aromatic carbocyclic or heterocyclic ring;

a compound of formula IV:

where R³, R⁴, R⁷, R⁸ and Z are as defined in relation to formula III;

a compound of formula V:

$$\mathbb{R}^3$$
 \mathbb{R}^7 \mathbb{R}^7 \mathbb{R}^7

where R^3 , R^4 , R^7 and Z are as defined in relation to formula III, and R^9 is C_1 - C_4 alkyl or C_1 - C_4 alkoxy;

a compound of formula VI:

$$R^{10}$$
 Z N R^{7} VI

where R^7 , R^8 and Z are as defined in relation to formula III and R^{10} and R^{11} are independently selected from hydrogen, C_1 - C_6 alkyl, C_1 - C_6 alkoxy, NO_2 , NH_2 , C_1 - C_6 haloalkyl, halogen, C_3 - C_6 cycloalkyl, aryl, C_3 - C_6 alkenyl, C_2 - C_6 alkynyl and aryloxy;

a compound of formula VII

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where R^7 , R^8 and Z are as defined in relation to formula III and R^{12} is hydrogen optionally substituted C_1 - C_6 alkyl, optionally substituted C_3 - C_7 cycloalkyl or optionally substituted aryl; a compound of formula VIII:

where ϕ is optionally substituted aryl and R⁷, R⁸ and Z are defined in relation to formula III; a compound of formula IX:

$$\begin{array}{c} \phi \\ \phi \end{array} \begin{array}{c} Z \\ \end{array} \begin{array}{c} N \\ \end{array} \begin{array}{c} R^7 \\ \end{array} \end{array} \hspace{1cm} IX$$

where R^7 , R^8 and Z and ϕ are as defined in relation to formula VIII; or a compound of formula X:

$$\mathbb{R}^{12}$$
 \mathbb{R}^{7}
 \mathbb{R}^{8}